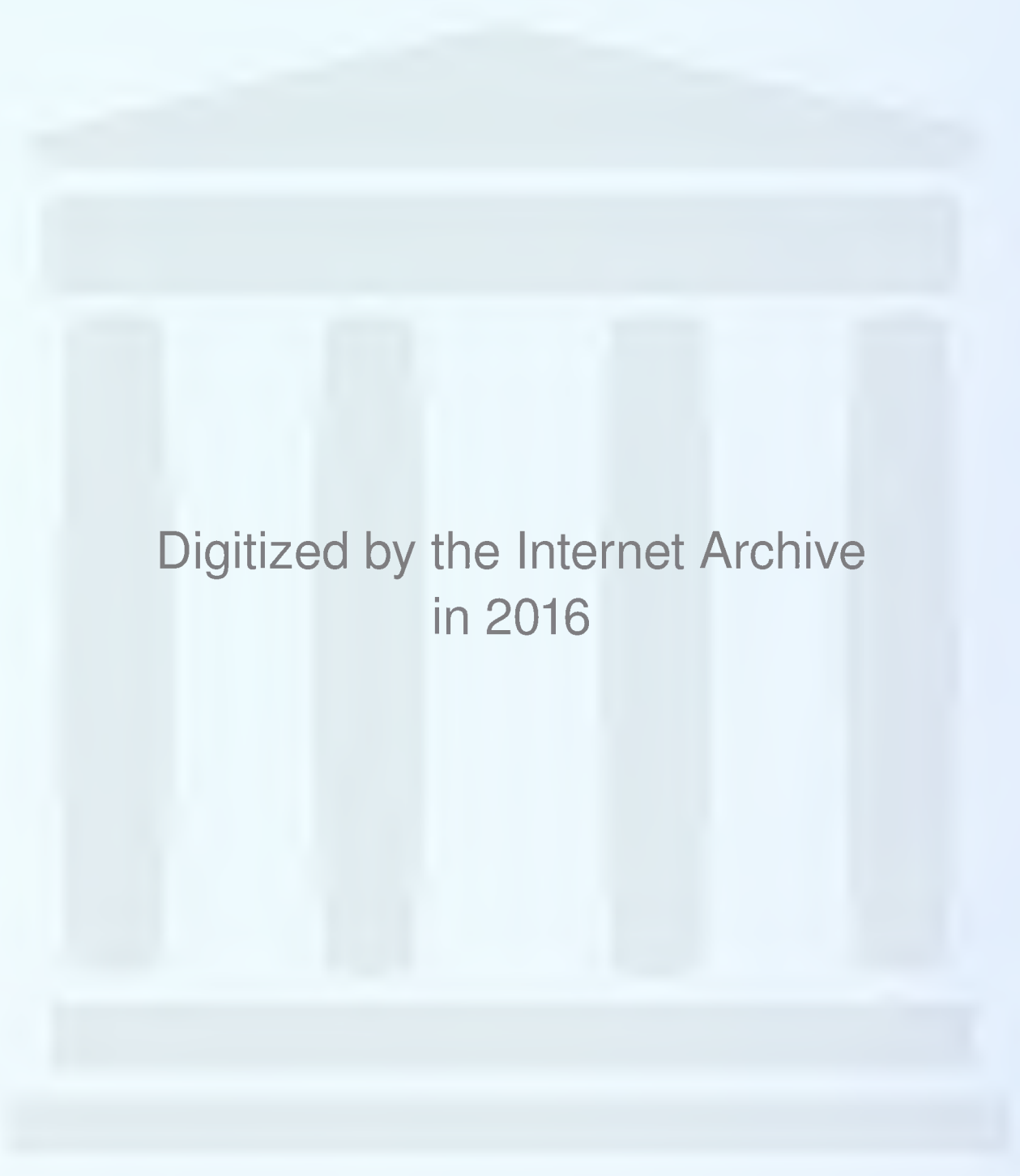


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**CIVIL
DEFENSE**

**COUNCIL
CIVIL DEFENSE
SBURG, PENNSYLVANIA**

**FOR
SCHOOLS**

DOCUMENTS SECTION

CIVIL DEFENSE

***for* SCHOOLS**



STATE COUNCIL OF CIVIL DEFENSE

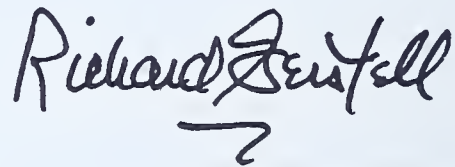
HARRISBURG, PENNSYLVANIA

1952

FOREWORD

THIS MANUAL has been prepared by the State Council of Civil Defense in cooperation with the Department of Public Instruction. Parts of the material included in the booklet previously have appeared in other civil defense publications from various sources and their use is herewith gratefully acknowledged.

The primary purpose of the manual is to provide school administrators and teachers with a guide for use in discharge of their civil defense duties and responsibilities. It is hoped that the materials presented also may be used to advantage in the everyday teaching program.

A handwritten signature in black ink, reading "Richard Gerstell". The signature is fluid and cursive, with a large, stylized "R" and "G".

RICHARD GERSTELL

Director of Civil Defense

CONTENTS

	PAGE
FOREWORD - - - - -	iv
PART ONE	
PLANNING THE PROGRAM - - - - -	1
A. Fundamentals of an Effective Program - - - - -	1
B. Shelter Areas - - - - -	2
C. Air Raid Warnings, Alarms and Drills - - - - -	4
PART TWO	
TEACHING GUIDES - - - - -	7
A. General Suggestions for Teachers - - - - -	7
B. Suggestions for Teachers and Pupils - - - - -	8
C. Suggestions for Kindergarten to Grade Three - - - - -	9
D. Suggestions for Grades Four to Seven - - - - -	11
E. Suggestions for Grades Eight to Twelve - - - - -	13
PART THREE	
SUPPLEMENTARY MATERIALS - - - - -	15
A. Suggested Letter to Parents - - - - -	15
B. Suggestions for Use at Parents' Meetings - - - - -	15
C. Reprint of Magazine Article - - - - -	16
D. Jobs for Which High School Students Can Volunteer -	19
E. First Aid in Emergency Situations - - - - -	19
F. Partial List of References on First Aid - - - - -	21
G. First Aid Instructors - - - - -	22
H. A Family First Aid Kit - - - - -	24
I. A Suggested List of School First Aid Supplies - - - - -	26
J. School Display Ideas - - - - -	27
K. Magazine Articles of Special Interest to Teachers - - -	30
L. Partial Bibliography for Teachers and Students - - -	31
M. General Civil Defense Film List - - - - -	32





PART ONE

PLANNING THE PROGRAM

A. FUNDAMENTALS OF AN EFFECTIVE PROGRAM

1. *Every School Requires a Self-Protection Program*

a. In present day warfare, not only military forces and installations, but also civil populations and institutions become attack targets. Schools are subject to bombing just the same as gun emplacements, private homes, industrial plants, factories and churches.

b. Should an enemy attack us with modern weapons, no school can rely upon outside help to provide the protection required for its children. Each individual school, public, private and parochial, must develop its own program of self-protection.

c. Self-protection for schools calls for two things:

(1) Teaching each pupil proper methods of personal protection.

(2) Development of special teams trained for emergency action.

d. Insofar as schools are concerned, self-protection and civil defense are one and the same thing.

2. *Administrative Responsibility for the Protection Program*

a. Responsibility for development and operation of a sound self-protection program rests with the chief administrator of each school district.

b. The administrator may delegate authority, but in final analysis, responsibility for the safety of all pupils lies squarely on the shoulders of the school chief.

3. *Principal Duties of the Administrator*

The school administrator's civil defense duties generally comprise seven primary steps, namely:

a. Appointment of a School Civil Defense Council, responsible for the development of general policies and procedures. (Should be chosen from parents, school personnel and other interested individuals.)

b. Appointment of a Civil Defense Director for each school building. (Should be a faculty member or full-time employee working within the building.)

c. Appointment of three persons (with designated order of responsibility) who shall act

for the Civil Defense Director in the event he is either absent or unable to act.

d. Appointment (from faculty, administrative personnel or student body) of emergency committees in each school, responsible for activities relating to:

- (1) Air raid warnings
- (2) Shelter
- (3) Fire fighting
- (4) First aid
- (5) Emergency feeding
- (6) Public relations

e. Procurement and supply of civil defense equipment and materials required for protection of each school building. (Fire extinguishers, ladders, rope, hand tools, stretchers, cots, blankets, first aid materials, flashlights, battery-powered radios and similar essentials.)

f. Periodic appraisal of the civil defense program, including the inspection of equipment and facilities.

g. Maintenance of complete and accurate records for each school building. (Personnel lists, inventories, records of drills and training activities, etc.)

4. *Provisions for Shelter*

Every school should *provide and clearly mark shelter areas* adequate for the temporary housing of all occupants of the school. (See Page 28, "Standard Signs For Civil Defense Use.")

5. *Establishment of Standard Air Raid Precaution Procedure*

Every school should establish a standard procedure to be followed in case of enemy attack. This should be designed to take all occupants of the building to designated shelter areas as quickly as possible and with a minimum of confusion. (See Section B, "Shelter Areas," below.)

B. SHELTER AREAS

1. *Essential Characteristics*

a. School shelter areas are selected spaces providing the maximum, readily available protection from bomb blast and heat. In general, they should be comparatively strong-walled, heavily-roofed rooms (or corridors) located in the lower portion of the building.

b. They should embrace the least possible amount of glass and provide not less than four to six square feet of floor space for each assigned occupant.



c. Every area should have a minimum of two entryways and at least one emergency exit, preferably leading directly to the outside of the building.

d. Drinking water and toilet facilities should be readily available.

e. Where necessary, special provisions should be made for protection from possible dangers resulting from rupture of steam, gas and water mains.

2. *Utilization of Existing Facilities*

a. Insofar as possible, existing facilities should be used for school shelter areas.

b. New, or special, structures should be constructed only if existing facilities are considered grossly inadequate.

c. Rooms and corridors with ceilings resting on inside, rather than outside, walls should be utilized for shelter purposes.

d. Ideally, the tops and sides of such areas should be capable of withstanding "wind" pressures of roughly 100 pounds per square foot.

(For technical details see *The Effects of Atomic Weapons*, U. S. Government Printing Office, Washington 25, D. C. 1951, \$1.25.)

3. *General Suggestions*

The following suggestions are offered as guides for use in the selection and preparation of shelter areas, keeping in mind the fact that safety of the children should receive *first* priority—safety of property, *second*:

a. Always take full advantage of basement spaces and interior corridors on the ground floor.

b. Areas with skylights, as well as upper floor rooms and corridors, are especially hazardous and should not be used for shelter purposes.

The same holds true for most auditoriums, gymnasiums and other large "open" spaces, particularly those with high, outside walls and large, or numerous, windows.

c. Boiler rooms, steam pipe "tunnels" and similar places should never be used as shelter areas.

d. Possible dangers from broken window glass may be greatly lessened by installation of wooden shutters, fine-mesh screen, or even the hanging of heavy cloth draperies.

e. Equip all shelter areas with some form of auxiliary lights which will operate entirely

independent of the "regular" school power system. Small electric lanterns, or a few flashlights and extra batteries, should be sufficient.

f. A few essential hand tools (pick, shovel, crow bar, saw, etc.) should be kept in each shelter area for possible use in opening up exits blocked by debris.

g. Several small police, or referee's, whistles should be hung in each shelter area. They are ideal for calling rescue workers, if needed.

h. All shelter areas, including entrances and emergency exits, should be clearly marked.



4. *Small School Problems*

a. The selection of shelter areas in small school buildings, particularly those consisting of only one, two or three rooms, will often present perplexing problems. For example, there frequently may be no basement or interior corridors. Sometimes it may even appear as if it might be best for the pupils to seek shelter out-of-doors.

b. Most of our smaller schools, fortunately, are situated in the less densely populated areas where likelihood of bomb attacks is comparatively small. In such places, the greatest dangers will probably come from flying glass and from

heat. The thinnest sort of shielding, a plaster wall or even a sheet of paper, will provide protection from the bomb's heat flash.

c. Possibly the safest place for the students is crouched beneath their desks. In that position, the desk tops and sides should provide reasonable protection, not only from broken window glass, but from other flying objects as well.

d. Students should never seek safety near a stove, or directly opposite windows, where broken glass is almost sure to be blown against them.

e. Common sense should be the guiding principle followed in the selection of small school shelter areas.

C. AIR RAID WARNINGS, ALARMS AND DRILLS

1. *School Air Raid Warning*

a. Every school should make arrangements through local civil defense authorities to receive the earliest possible Air Raid Warning. Each school should participate in all civil defense communication tests and practice alerts in its own area.

b. In most communities, the first warning of attack will come to the school by telephone. Some schools, in turn, may be asked to help "fan out" the warning by telephoning to one or more additional schools.

2. *Telephone Warning Chain*

a. Answering the telephone AT ONCE must become a safety habit in every school building. Where children answer the telephone, they must be instructed to call the nearest adult to the telephone AT ONCE for any emergency call.

b. The telephone warning plan should be tested periodically. When it is used for testing purposes, the words "This is a telephone test call" must be the first and last words spoken. The person who answers the telephone must repeat these words before hanging up.

c. A written record of the nature and time of receipt of all communications through the established warning chain should be kept.

3. *School Alarms and Signals*

a. The following signals are suggested:

- (1) A series of six short rings repeated at least once. This signal can be given on classroom, hall, basement and yard bells.
- (2) The ALL-CLEAR signal is two long rings on the same bells.

b. *The fire alarm signal must not be used to signal air raid alarms.*



c. Sufficient practice must be given to make certain that all members of the school promptly recognize the difference between air raid signals and other school signals.

4. *Suggestions for Teachers*

- a. March class promptly to assigned shelter area.
- b. Take roll call sheet, or class roster to shelter area.
- c. Avoid windows.
- d. Provide some form of mental activity for children. (See Part Two, Section C, 3, page 10.)
- e. Remain in shelter for further directions or ALL-CLEAR signal.
- f. Stay with children until properly relieved.

5. *Auxiliary Staff Members*

- a. Supervisors, medical staff members, attendance officers, and all other school officials should report to stations designated by the administrator.
- b. Maintenance workers, custodians, cooks, etc., should also have assigned drill locations and duties.

6. *Physically Handicapped Children*

- a. Adequate provision should be made for physically handicapped children. Special plans for the care of these pupils, as well as those in school infirmaries, should be drawn up immediately.
- b. An up-to-date list of handicapped children should be kept. The school medical inspector or the nurse could assist in preparing this list, and in planning for their necessary care.

7. *Use of Elevators*

- a. In all emergencies and drills, elevators should be used only for the immediate carrying of physically handicapped children to the floors where shelter areas are located. Elevators should then be run to the lowest level of the elevator shaft and left there.
- b. Operators should then proceed to their assigned shelter areas.



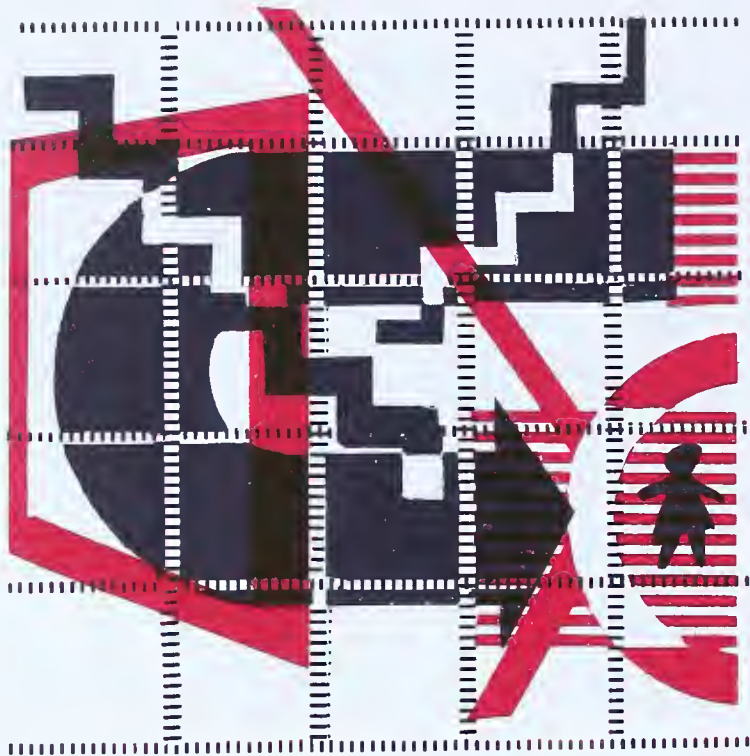
8. *Suggestions for Custodians and Building Engineers*

a. Air Raid Precautions "Advance Notice"

- (1) Stop fuel supply to boilers.
- (2) Allow plant to remain in operation under normal conditions except all fires are closed down.
- (3) Allow all vacuum pumps to operate and bring back condensate as rapidly as possible.
- (4) Turn off all open-flame gas devices (except automatic heaters).
- (5) Allow water supply to remain in normal operating condition.
- (6) When time has lapsed up to the time of "Short Notice", close down heating plant completely with the exception of operating the return condensate pump. If it is not possible to operate pumps separately, shut them down.
- (7) Following an explosion, make thorough inspection of building immediately, both inside and outside.

b. Air Raid Precautions "Short Notice"

- (1) Stop fuel supply to boilers.
- (2) Pull power switch, or switches, controlling ventilating fans.
- (3) Close main header valves and stop all steam engines driving ventilating fans.
- (4) Stop air compressor and bleed main air pressure tank.
- (5) Keep boiler room watch from safe location nearby.



9. *Suggested Plans for One, Two and Three-Room Schools*

- a. School will rely on town signals for warnings.
- b. For drill purposes, teachers should use small whistles for signals.
- c. Children should sit or curl up on floor close to wall.

- d. Areas opposite windows or close to doors and stoves should be avoided.
- e. Teachers should turn off all electric, gas and oil utilities, except radios.
- f. Fire extinguishers should be in good working order and both teachers and students should know how to use them.
- g. Teachers should remain with the children until the "All-Clear" is sounded, or until properly relieved.
- h. Use of the telephone should be avoided, except for fire or similar emergency.
- i. Bus drivers should be alerted and know where to report.
- j. In the event an alert is sounded while the children are on the playground, they should take shelter inside. (If the first indication of attack be a bomb flash, they should drop to the ground, face down, and protect their faces with their arms.)
- k. All First Aid Kits should be kept fully stocked, ready for instant use.
- l. Both teachers and students should be trained in basic first aid.





PART TWO

TEACHING GUIDES

A. GENERAL SUGGESTIONS FOR TEACHERS

1. Familiarize yourself with all available literature on how to survive an atomic bomb. (See Bibliography in back of manual.) Adapt this information to the particular group of pupils with whom you are working. If there are questions for which you lack answers, contact your local civil defense officials.

2. Sometimes children are troubled or worried by stories about war or bombings. They hear of such possibilities in the conversation of adults or over the radio. They see war pictures in booklets, at the movies, or on television. If they voice fears or ask questions, encourage them to talk. By so doing, you can help the children in two ways. First, merely expressing fears helps reduce "tensions". Second, you can give them correct information on how to protect themselves from an atomic bomb and increase their confidence in their ability to survive an attack.

3. A possible method of introducing the subject of atomic bombs and instructions concerning safety procedures is outlined in the following sections. As much time as is needed should be given this instruction. Too much should not be given at any one time. At the

end of each day's lesson, you should review with the children the information they will talk over that night with their parents.

4. When you give your pupils information about the bomb, ask them to take copies home. The material may be duplicated (mimeographed, hectographed, multigraphed, etc.) by the school; or, older children may take notes and write it down under the direction of the teacher.

5. Encourage students to discuss the material taken home with their parents, and keep it for later reference. Also encourage the children and their parents to bring to the school any questions they may have after home discussion of the information.

6. From time to time, review essential information with the pupils. Just after an air raid drill may be a favorable time to re-emphasize key safety procedures.

7. While this material stresses protection from atomic bombs, shelter is the basic form of protection from all kinds of attack. Just remember that it sometimes may be necessary to leave the building shortly after a raid, particularly if fire, or incendiary, bombs are dropped.

8. Explain to children that their parents will know these rules and follow the same ones wher-

ever they may be. In this way, you may relieve children's anxieties about their parents.

9. In teaching the essential facts and procedures necessary for self-protection, it is most important to teach the children **WITHOUT FRIGHTENING THEM**.

10. Subject matter for all grades should include:

- a. Taking cover—how, where and why.
- b. Conduct on way to and from school, on the playground, and over weekends.
- c. Conduct when separated from the family.
 - (1) Younger children should know the full name, address and telephone number of parents.
 - (2) Younger children should be familiar with appearance of policemen and civil defense workers and taught how to seek them out in emergencies.

(3) Older children should be well versed in general preparedness, including preparation of first aid kits, use of fire fighting equipment, and procurement of emergency food and water supplies.

11. Older children, in addition, can be taught:

a. What they can do at home to help develop home preparedness:

- (1) Helping their mothers equip the home, first aid kits, emergency food shelf, fire extinguishers, flashlights, lanterns, etc.
- (2) Helping mother close the house if the alarm sounds.

b. Living like pioneers:

- (1) Prepare children for the possibility of being without a stove, water, electricity, gas—like camping out.

(2) Tie this aspect in with scouting. Thus, without scaring them, you prepare them for the possibility of widespread devastation. If they are prepared to "live like pioneers" they will be a help, rather than a hindrance, in time of crisis. Appeal to such groups as Boy Scouts, Girl Scouts, Junior Red Cross organizations, etc.

B. SUGGESTIONS FOR TEACHERS AND PUPILS

1. *If the Warning Signal Sounds*

a. When children are in school:

- (1) Go to the shelter quickly and quietly.
- (2) Pupils should be instructed that, in case any of them are out of the room when the warning sounds, they should go to the shelter by the most direct route and report at once to the teacher.

b. When the children are on the playground:

- (1) Listen for the whistle of the teacher.
- (2) Go directly to the teacher for instructions.

c. When children are walking or bicycling to or from school:

- (1) If the child is on foot, he should run to the nearest house or shelter.
- (2) If near the school, he should be instructed to return to the school.
- (3) If near his home, he should return home at once.
- (4) If more than 5 to 8 minutes from either home or school, he should seek shelter in a nearby house or building.
- (5) If he is not near a building, he should lie down at once as he has been instructed to do at school, either in the gutter, near a curb, or behind any form of shelter.

d. If children are in a bus, they should obey the instructions of the bus driver. (It is important that bus drivers be given complete instructions by school authorities.)

e. If the children are in a private conveyance, the driver will stop the vehicle at once and occupants will proceed to the nearest shelter.





(This might well be a subject of a letter to parents, asking their cooperation on this point.)

2. *If There is No Warning, but a Very Bright Light in the Sky*

a. When children are in school they should:

- (1) Lie face down on the floor under a desk or table and bury their faces in their arms.
- (2) Remain there until instructed to get up or move.

b. If out-of-doors, the children should:

- (1) Quickly lie face down and bury faces in their folded arms.
- (2) Remain there at least until the "debris stops falling", or until instructed to move by a "grown-up".

3. *When the "All-Clear" Signal Sounds*

a. If in school, the pupils should either go back to their classrooms, or assemble outside the building, as directed by their teachers.

b. If en route to or from school, children should be taught to follow the instructions of the bus driver or some other "grown-up" nearby. (Older children should be instructed to watch what older people do and then, if it appears to be in order, to proceed on their way.)

C. SUGGESTIONS FOR KINDERGARTEN TO GRADE THREE

1. *Talking it Over with Children*

a. Comparatively few teaching materials have been developed for children in these grades. The necessary information should be presented as gradually and as naturally as possible. This can be done best by talking it over with the children and answering their questions.

b. The information presented in this booklet is up-to-date and accurate and should be used by all teachers. The method and language used will vary according to the maturity of the children. Probably several days should be taken to present the information. Third grade children may require fewer lessons and less repetition than younger children. The teacher's most important responsibility is to be calm and assuring and to allay the fears of children.

2. *Possible Conversational Approaches which a Teacher May Use*

a. "How many of you have ever seen Norman Harris' program, *LIVING WONDERS*, or *THE ZOO PARADE* on television? What have you learned about the ways in which plants and animals protect themselves?"

b. "How have the people in our country had to protect themselves in days gone by from Indian attacks, storms, floods, etc.?"



c. "What dangers do we face every day from automobiles, fires, and on the playground?"

d. "What are some of the things we have learned already about taking care of ourselves?" Likely answers include:

(1) "We walk through a building, we do not run."

(2) "We stop at the red light when we are walking to school."

(3) "We watch for the policeman's signal before crossing streets."

(4) "In a fire drill, we walk quickly and quietly out of the building."

(To list given answers on the blackboard, or a special chart, may prove helpful.)

e. "How many of you like to see cowboy movies, or watch Hopalong Cassidy and the Lone Ranger on television?"

f. "Have any of you seen pictures, in the paper or on television, of soldiers fighting in Korea?"

g. "How is the fighting in Korea different from the kind you see in cowboy pictures?"

(1) In the discussion which follows, the kinds of weapons will probably be discussed. This should lead to some mention of the atomic bomb.

(2) After finding out how much children already know, or think they know about it, the teacher can then go on with the material included under *Some Things Children Need to Know*.

(It may be that little discussion or understanding of questions f and g is either possible, or desirable, with kindergarten children. Perhaps the most we should expect of them is that they understand the necessary safety rules and follow them.)

3. *Some Things Children Need to Know*

a. "On the 4th of July, you have seen or heard firecrackers or fireworks. They make a loud noise and a bright flash. If you are not too close, they do you no harm. Of course, if you are even a little careless, you can be hurt by firecrackers. That is why, in many states, we have laws against the sale of them."

b. "A bomb is something like a big firecracker. It makes a loud noise and a very bright flash. We hope that a bomb may never fall on our town or any part of our country. But let's find out enough about the atomic bomb to learn to take care of ourselves should it strike."

c. "First of all, if any enemy airplanes were coming, we would probably receive a warning in time to get to a safe place. A safe place is a shelter. A house, a garage, a schoolhouse, a store, a subway or a library can be a shelter. Let us find out how to get to the shelter in our schoolhouse."

(1) It is important to present the idea of the shelter gradually, in order not to arouse unnecessary fear.

(2) Plan to have familiar materials in the school shelter.

(3) Take children to shelter occasionally for songs, story telling, or for dramatizations. Let them get used to the idea of going to the shelter.

d. "We have never had a bad fire in any of our schools, but you know that we have fire drills often, so that we can learn how to take care of ourselves if there were a fire. In just the same way we are going to have some new drills, which we will call air raid drills. We don't expect to need these drills, but again we want to know how to take care of ourselves. This time our drills are going to take us to special places inside our building (or, for some schools, inside a nearby building.) Let us plan how to go quickly and quietly to our shelter."

(1) Make a chart of the children's responses to the suggestion of a plan. Be sure ALL of the following facts are stated and are understood by the children:

(a) "When we hear the signal, we must STOP, LOOK at the teacher, and LISTEN."

(b) "We must GO TO THE SHELTER at once."

(c) "We must GO QUIETLY."

(d) "We must NOT PUSH against each other as we walk in line."

e. "Now let's go down to our shelter and play some games there."

(1) After returning to the classroom, the teacher should be sure that the children understand the lesson on preparedness.

(2) The next day the teacher should review the previous day's lesson, drawing from children the information they learned.

(3) Teachers may find it desirable to make a chart, appropriate to the grade level, of this information.

D. SUGGESTIONS FOR GRADES FOUR TO SEVEN

1. *Talking it Over with the Pupils*

- a. What are some of the ways by which plants and animals protect themselves?
- b. How have the people in our country had to protect themselves?
 - (1) In colonial and frontier days?
 - (2) During past wars?
 - (3) From the forces of nature?
 - (4) From hazards of sports, transportation, etc.?
- c. What are some of the ways we have already learned to protect ourselves today?
 - (1) In school?
 - (2) At home?
 - (3) On the street?
 - (4) In public places?
- d. Have children ever had to protect themselves against bombs?
 - (1) In England, school children learned safety rules and went to shelter areas when necessary.
 - (2) They continued with their education, and only a few out of the many thousands in school were hurt.
- e. Why does the present state of emergency make it urgent that we learn new ways of protecting ourselves?
- f. What do you know about the atomic bomb?
- g. How many of you have read about the bomb experiments at Bikini? In Nevada?
 - (1) There were 42,000 men at the two atomic explosions which government scientists set off at Bikini.
 - (2) Not a single one of those 42,000 men was hurt by atomic rays, although two bombs were exploded and there was plenty of danger.
- h. Let us see some of the things we need to know about atomic bombs and how to protect ourselves against injuries possibly caused by them.

2. *Things the Pupils Should Know*

a. If you have been reading papers, listening to the radio, or watching television, you know that our country is facing many problems at this time. To make matters worse, some papers and news commentators make the news sound more serious than it is.

b. The United States has faced many crises in its history and has always come through them successfully. The population of the United States is made up of a proud, courageous people. They are not people to shiver at the thought of danger. You boys and girls are the descendants of thousands of men and women who fought to stay alive.

c. Today, many people are talking about atomic energy, about its benefits as well as its danger. Every day men and women are learn-

ing of new helpful uses of this power in medicine, industry and agriculture.

d. Many people are worrying about the atomic bomb, yet they have not tried to learn much about it. Too few of us know that many of the earlier reports of the bomb's supposedly mysterious powers are not true. The truth is not nearly so bad as most people think, for protection is possible. The United States Government has given us a book which tells the truth about the bomb and how to protect our-



selves from it. (See Bibliography at back of manual.)

e. We are not trying to fool you about the bomb, but we do want to tell you how to protect yourselves at school and on the way to and from school. Should the bomb strike, these same rules will help you wherever you may be.

3. *How Afraid Should I be of the Atomic Bomb?*

a. We need not fear it very much. We are much more likely to have an accident at home

or from an automobile than to be injured by an atomic bomb.

b. We do need to know, however, what the bomb does and how to take care of ourselves. Ignorance makes fear. Fear makes panic. Panic might cause more trouble than a bomb.

4. *What Does the Bomb Do?*

a. The bomb has "KNOCKDOWN POWER". Its "blast wave" is like a powerful, sudden wind that starts out from the exploding weapon at about ten times the speed of a hurricane, or 1,000 miles per hour.

(1) A low hill or even a high earthen bank may completely cut off the blast.

(2) If you have only a second's warning, there is one important thing you can do to lessen your chances of injury by blast—FALL FLAT, FACE DOWN, and bury your face in your arms.

b. The bomb gives off a flash of light and heat. Usually people speak of this action of the bomb by the one word, HEAT.

(1) The HEAT FLASH comes at the moment the bomb goes off. It lasts several seconds. The flash makes a light so bright that people can see it several hundred miles away, even in the daytime. It will probably blind you a few seconds or minutes if your eyes are open and you are close to it—just as any strong light like a searchlight can blind you for a time.

(2) The HEAT that comes with the flash can cause unprotected people and animals to get painfully burned. But this heat can easily be stopped. It lasts only about three seconds. Materials such as heavy cloth or stiff pasteboard will not let the heat flash pass through.

c. The bomb gives off atomic rays or radiation.

(1) These rays are given off when the bomb explodes. You can't see them. You can't feel them. You may even be hit by them and go right on without even knowing it. Neither can you see nor feel X-rays when a doctor uses them for a treatment or to take an X-ray picture, but the rays are there. The sun and stars also give off radiation. Too long exposure to the sun's rays in the summer can burn you and make you ill. We call that "sunburn."

(2) Although these rays are powerful and dangerous, if you are near the point where a bomb explodes, you can protect yourself from these rays. Some of the things that will protect you are:

- (a) Buildings.
- (b) Walls of buildings.
- (c) Air-raid shelters.
- (d) Earth around the cellar of a house.
- (e) An ordinary ditch.

d. Additional facts about the effects of the atomic bomb.

(1) The rays will NOT, as some people think, kill you if you just get a little of them. It all depends on the amount you get.

(2) The rays will NOT make it dangerous for someone else to touch you if you, yourself, have been touched by the rays. People CANNOT catch from other people the sickness which atomic rays may cause.



(3) The use of the atomic bomb will NOT make the whole world unfit to live in.

(a) It would take a huge number of the bombs—almost a million of them, all exploded at about the same time—to make the world unsafe for human life.

(b) One bomb is exceedingly expensive and no nation will ever have a million of them.

(c) The plant and animal records we have from the Japanese bombings and the Pacific Island tests prove that animals made sick by bomb rays often recover completely.

(d) Plants have grown right back on the ground where atomic bombs were used.

E. SUGGESTIONS FOR GRADES EIGHT TO TWELVE

1. *Introducing the Subject*

a. People have always had to protect themselves from other peoples, forces of nature, the products of man's ingenuity and inventiveness, hazards of transportation, etc.

b. Protective procedures and devices have been found to combat these dangers.

c. The crisis in the United Nations, Korea, Red China, Russia and the like warns us of danger.

d. The present national emergency, the need for civil defense, the steps taken in your own town, are necessary protective measures.

e. Man's recent release of atomic energy, first accomplished during World War II, combined with six years of increasing knowledge of its uses, indicates a need for protection.

f. The beneficial and destructive possibilities of sudden releases of tremendous amounts of energy:

- (1) Mt. Etna.
- (2) Electricity.
- (3) Natural gas.
- (4) TNT.
- (5) Atomic energy.

g. The challenge of atomic energy:

- (1) Another type of powerful explosive.
- (2) A means to improve living conditions.
- (3) Its development and control essential.
- (4) A deterrent to aggression.
- (5) Protection against its destructive forces.

2. *Things the Student Should Know*

(See Suggestions For Grades Four To Seven on preceding pages. Improvise or elaborate on this material to suit the particular age level of students being taught.)

3. *How Much Should we Fear the Atomic Bomb?*

a. Not as much as some people think. To be sure, it is powerful. Also, however, the bomb is less disastrous than we once were told it was. We are in more danger from lightning or from an automobile accident.

b. The major damage (85%) from an atomic bomb is the same as from other types of bombs. People protected themselves from these. We all know that in England, during World War II, people continued to live, work,



go to school, despite all the bombs dropped on the country.

c. One of the worst dangers could be from panic; from people not knowing what to do; or from people rushing about blocking roads, bridges and tunnels. Learning the rules for protection is essential to safety.

NOTE: Most of the material presented in Sections D and E, above, has been taken from *How To Survive an Atomic Bomb* by courtesy of Combat Forces Press and Bantam Books, Inc.

4. *What are the Characteristics of an Atomic Bomb?*

(See Suggestions For Grades Four To Seven, "What does the Bomb Do". Present this subject matter on a more mature level, suited to the particular age group, or level, of the students.)



PART THREE

SUPPLEMENTARY MATERIALS

A. SUGGESTED LETTER TO PARENTS

1. Letters should be short and concise.
2. They should point out the help that parents can extend in the teaching program.
3. A suggested sample letter to parents follows:

TO PARENTS:

In view of unsettled world conditions, it is considered important that all schools develop plans to protect their children in the event of a local emergency during school hours.

As you know, school children always have been given training in Fire Drills. Now they also will be given training in Air Raid Drills.

Should an attack be made on our community, please do NOT try to come to the school. Do NOT use the telephone. We will take care of your child to the best of human ability. He will be as safe in school, under the guidance of fully-trained teachers, as he could be anywhere. When the all-clear is sounded, he will return to his normal activities and, of course, will still be under the care of his trained instructors.

From time to time your child will bring home preparedness material to show to you. Will you please read this material and talk it over with your child? In this way, you will know exactly what he is being taught. You will also be in position to help him by answering his questions in a calm and matter-of-fact way. This will increase both his confidence and his ability to protect himself.

Yours truly,

(Teacher's name)

B. SUGGESTIONS FOR USE AT PARENTS' MEETINGS

1. Meetings of parents or Parent-Teacher Associations will prove valuable in coordinating family civil defense plans with those of the school and the community.

2. Representatives of county and local civil defense organizations, school civil defense administrators and others who are well informed in civil defense matters should be invited to attend and address such meetings, and to discuss plans of organization and operation.

3. A meeting program might offer the following topics for discussion and study:

- a. Federal, state, county and local civil defense organizations.
- b. The school civil defense program.
- c. The plan for home protection.
- d. The place of the individual in civil defense.
- e. The different kinds of civil defense activities.
- f. Firefighting for householders.
- g. Emergency action to save lives.
- h. Cooperation with civil defense workers.

4. The following publications may be obtained at nominal prices from the U. S. Government Printing Office, Washington 25, D. C., and should prove most valuable to parents, teachers and others interested in civil defense.

- a. "This is Civil Defense."
 - b. "Emergency Action to Save Lives."
 - c. "Survival Under Atomic Attack."
 - d. "Firefighting for Householders."
- (See Bibliography at back at manual.)

C. REPRINT OF MAGAZINE ARTICLE

(The following article by Andre Fontaine is reprinted from TODAY'S WOMAN, June, 1951, Fawcett Publications, Inc., by permission of the publishers.)

ARE BOMB DRILLS SCARING OUR KIDS?

Left to themselves children are not afraid of bombing—by A-bomb or any other bomb. But adults are!

Our children are scared. I found this out recently when my wife and I drove into New York City with our son, Mark, on his eighth birthday, to see the rodeo. We expected him to be dancing on clouds with his pockets full of star dust. He was excited all right, but not the way we expected. On our way home he was quiet, until suddenly he said, "How far are we from the city now, Daddy?"

"About ten miles," I told him. Ten minutes later he asked again. "About fifteen," I said. This went on every ten minutes or so. We couldn't understand what he was getting at. Finally, when I said we were about thirty miles out he heaved a sigh. "Boy," he said, "I'll sure be glad when we get home. Then if an atom bomb falls on New York we'll be safe."

My wife and I looked at each other in startled silence. Apparently the kid had been worrying all the time we were in the city.

That woke us up. Mark had been having A-bomb drills in his school and we decided to find out whether those drills were giving our kid the jitters.

In an early bomb drill in a New York City school, a teacher drew a line on the floor and when a crouching boy's foot stuck over the line, she said, "There! Your foot was burned off." In Idaho a mother said, "Atomic bombs" had become the chief weapon in children's play warfare. In Los Angeles, classes were told the A-bomb "blows up houses and makes the earth wiggle."

In Boston seven-year-old Andy Hanover couldn't sit still in class and began having frequent nightmares. Nobody knew what was bothering him until one day he drew a picture of an airplane dropping bombs. "If the enemy comes," he said, "I'll mow 'em down. It's awful the things that can happen. Babies are killed, children's homes are burned. All we can do is pray." He was silent a few moments, then said seriously, "I'm not going to get married until I get through serving in the Army because I might have to kill someone."

Generally, the most fear seems to be felt along the East and West Coasts. So far that's where school drills are practiced most. But many large inland cities are

planning them for the near future. Not one child-care expert with whom I talked suggested that we stop school drills, but every one emphasized that they must be handled wisely or they will increase children's fears.

Many children don't show fear directly. "There is always," said Dr. Benjamin Spock, co-director of the Rochester (Minnesota) Child Health Institute, "some tendency to get their fears out of sight. Children may show fear indirectly by suddenly becoming afraid of the dark, by refusing to go to school or to bed at night, or by not wanting to leave their parents."

In the Midwest a teacher asked her class of nine-year-olds, "What are you most afraid of?" Thirty of the thirty-two answered, "Bombs." If they could have three wishes granted, she asked what would they be? In every single answer appeared, "No more war." Yet, never once in class discussion had these children mentioned a fear of war.

Poorly handled drills, however, are not the chief cause of children's fears. We parents are the ones who are scaring our kids. We do it unconsciously. We pass our fear on to them through our conversations, magazines, radio, television and movies. "Children," said Dr. Spock, "always reflect the current fears of their parents, whether it's polio or the A-bomb."

"But children's fear is a very different thing from ours. If he's left alone," said Dr. John R. Rees, British director of the World Federation for Mental Health, who had long experience with English children under the blitz, "a child really isn't very frightened of war or bombings. His fear of these things come from his parents."

Children don't really understand death so it means little to them. They're also primitive; violence and aggression are natural to them, and on the whole, more exciting than terrifying.

The idea of bombing, in itself, doesn't frighten most children and neither do bomb drills, if they're properly run. What really scares them is that bombing may rob them of the security and love of their parents.

"Separation," said Dr. Lois Stolz, professor of Psychology at Stanford University, Palo Alto, California, "is one of the basic causes of anxiety in children. It goes back to a child's earliest infancy

when he and his mother are almost one. She gives him food and warmth and security. It's no wonder that the fear of losing her is the greatest terror."

Several months ago, Alice V. Keliher, Professor of Education of New York University, circularized a number of schools to find out how frightened the children were of war. Her questions brought little emotional response from the children in city public schools, but at a boarding school in Connecticut, nearly every child showed marked fear. Why the difference? The Connecticut children were separated from their parents.

What, then, can we do to help our children handle their fears? Basically, we must do two things: strengthen their sense of security and bring our own fear under control. We do this the way you conquer any fear—by action.

You can't get anywhere by trying to deny that fear exists; your kids know better. You can't accomplish anything by refusing to have bomb drills in schools either. It does no good to refuse to mention war unless you're also willing to smash your radio, stop taking newspapers and keep your youngster away from all other kids.

It's also useless to try to stop him from playing war games. In fact, Dr. Stolz says that these help him work out his fears. When a child plays war, talks about it or draws pictures of it, he's expressing his fears freely, instead of hiding from them.

What you should do, all the child-care experts agree, is to build up the warmth and unity of your family life. Do things together—both necessary household jobs and family fun.

Dewey Anderson, official of the U. S. Division of Civil Defense, says there are many things children can do—even young children. They can help clear rubbish out of the cellars and attics. They can help distribute civil defense papers and pamphlets and act as messengers. In school they can make maps of their town's resources, its water, sewer, light, gas and telephone lines. Older children can survey empty buildings as possible housing for evacuees, learn first aid even if they never use it, find out how many and where the people in town are who need special attention—like the aged, invalids, pregnant women, babies. They can survey the number of empty rooms and beds available in each house and what resources it has for fighting fires. Those who know how can help to do typing, duplicating, filing, recording and clerical work.

In Westfield, New Jersey, editors of the high-school paper recently put out a special issue which carried

complete-and-reassuring-information about the atomic bomb. It explained the limits of the damage area, do's and don't's for atomic survival, an explanation of the school's defense plans, the things needed in a home shelter and a complete story on what students can do in the civil defense organization.

In our own home we dreamed up an idea that seemed appropriate and the psychologists I asked agreed it was good. We took the kids down into the cellar one day. One section of our cellar has three and a half walls of brick. This, we said, would be a good shelter and the whole family could work together to fix it up. I told them how we could put heavy plywood over the small windows, how there was a separate exit to the outside, how we had water in the laundry tubs, heat from the furnace and a small laundry stove to cook on. We'd paint up the walls, reinforce the ceiling and finish the fourth wall. Then if we ever did get bombed—which was highly unlikely, I said—we'd have a safe, warm place to go.

Slowly we're doing it too. Of course I'm no expert on bomb shelters, but that isn't the point. Knowing it's there gives the kids a feeling of security even if it's never used and helping fix it up gives them the confidence that comes from action against fear.

The value of taking appropriate action makes school A-bomb drills good therapy for childhood fears. But of course they have to be handled carefully. Charlotte Carr, who is the director of the Citizens Committee on Children of New York City, says that before any drill is ordered, mental health specialists should advise principals and teachers on how to conduct it and how to keep the children from being frightened.

One point needs emphasizing: for younger children the drill should be conducted by their own teacher. She is their mother-away-from-home and her presence reassures them.

Dr. Stolz pointed this up with the story of a drill during the last war in Oakland, California. A kindergarten teacher carefully and calmly explained the forthcoming drill to her class. She also told them about the insidiousness of rumors. After the drill was held a five-year-old boy rushed home to tell his mother the exciting news: "Mommy, Mommy, today a great big rumor flew over the school and we all fell down on our tummies—even Miss Thompson!"

He was quite unfrightened, and the most impressive part of the whole drill was that teacher had fallen down too.

Calmness, everyone agrees, is essential. The kids should be given the idea that this is like a fire drill—

the fact that they're having a drill doesn't mean an A-bomb is going to fall tomorrow any more than a fire drill means the school is going to burn down. With younger children it's a good idea to let them take along to the shelter area a favorite toy for the sense of security it gives. In our school they play music for the youngsters or their teacher reads to them during the drill.

After a hurried and bad start, which scared many youngsters, the drills in New York City have been straightened out to a point where they're not alarming and are teaching the children lessons which one day may save them. In early February they held the first "silent alarm" drill—a frightening thing in itself for the teacher without warning suddenly cries, "take cover!" and the children dive under their desks and shield their faces. Yet, so well-conditioned were they that after the first drill Superintendent of Schools William Jansen was able to report, "no single incident of panicky or uncooperative behavior was reported."

Shortly before the drill, Dr. Jansen sent home a statement to all parents, containing sound advice: "The vast majority of children accept these drills matter of factly, as part of the school routine. You can help strengthen this feeling if you yourself accept them in the same spirit.

"Let your children talk to you about their air-raid drills if they wish. Remember they will be watching you closely to observe your reaction. Your attitude will largely determine theirs. If you are calm, they will be calm. If you are sensible, they will be sensible."

An example of how effective your own calmness can be in lessening your children's fears was given by Anna Freud and Dorothy T. Burlingham in *War and Children*, their authoritative report on English children during the blitz. A few days after a tremendous raid on London a mother appeared at a hospital's out-patient department with her little girl of five. She said simply, "She has a cough and a bit of a cold."

Only by questioning did the doctor learn that the mother and child had been rescued from a burned-down warehouse during a raid. The sudden exposure to the cold gave the child "a cough."

"We can be certain," wrote the authors, "that this child, protected and fortified by her mother's lack of fear and excitement, will not develop air-raid anxiety."

The British, in fact, can teach us a lot about how to control our fears—which we must do if we are to handle our children's. "It seems to me," said Dr. John Rees, "that what you need is much more education of adults on atomic warfare and what can be done to protect yourselves against it. Plenty can be done. Only this way will you relieve the unspoken anxiety that leads to apathy.

Dr. Rees put his finger on the hub of our fear—apathy. For four years we sat, smug and secure, behind our A-bomb and never thought of what it would mean to be on the receiving end of one. Then the Russians exploded their first one and blasted our security to bits—and fear swept the country.

But the British, knowing they would be a target in any atomic war, spent those same four years learning how to protect themselves. They've learned what the A-bomb's limits of destructiveness are and how to cut down casualties. They've trained a large corps of rescue workers and other A-bomb specialists. They've learned, in short how to put into practice the statement on atomic bombing that was made by the U. S. Strategic Bombing Survey: "Civilian injuries and fatalities can be reduced, by presently known techniques, to one-twentieth or less of the casualties what would be suffered were these techniques not employed."

That's why the British are not as frightened today as we are.

Belatedly, we're beginning to learn these same lessons. The U. S. Division of Civil Defense has put out a pamphlet, *Survival Under Atomic Attack*, which gives all the essentials and is now available in paper-cover editions on most news-stands. We all ought to know those facts so well they're second nature to us. They're reassuring. But knowing alone isn't enough. Like those of our children who are taking part in well-ordered school drills, we need to take positive action against our fears.

We should take part in our local civilian defense organizations. We should prepare our homes against possible air raids. We should figure out what the role of our town is likely to be—a target or a receiving place for evacuees from target areas—and get busy preparing it for its job. We should protect our homes and towns as efficiently as a crew does a battleship.

We may find that our efforts and organization will not be needed because we'll never be attacked, but this knowledge won't be wasted. If we prepare, we'll get the security that comes from feeling we're ready for anything, and we'll lose our fear.

When that happens the reassurance our kids learn in properly run A-bomb drills in school will be reinforced by our own lack of fear at home.

In Milwaukee, Wisconsin, there's a quiet-voiced public health doctor named Margaret Hatfield who said it very well: "People are going to have to realize it's up to them now. They won't be able to call in others to fix things—the police, the firemen and such—the way they do when the refrigerator stops and they call for a repairman. This time everybody has to do a job. And maybe that will be a good thing for America."

D. JOBS FOR WHICH HIGH SCHOOL STUDENTS CAN VOLUNTEER

1. Inasmuch as local civil defense officials plan to use many school buildings as emergency hospitals or mass care centers, students should volunteer for duty within their own school, if possible.

2. No student should volunteer for more than one type of duty.

a. *Jobs suitable for girls:*

- (1) Nurses aides.
- (2) Mobile canteen workers.
- (3) Mass care center workers.
- (a) Registration, clerical, telephone operators.
- (b) Child care, care of aged, recreation leaders, etc.

- (4) Mass feeding center—handling food, serving, etc.
- (5) Clerical workers in control centers, hospitals, evacuation centers, warden's posts, etc.

b. *Jobs suitable for boys:*

- (1) Litter bearers.
- (2) Rescue workers.
- (3) Maintenance and clean-up workers.

- (4) Vehicle loaders.
- (5) Stock clerks.

c. *Jobs suitable for either girls or boys:*

- (1) Air observers.
- (2) Guides.
- (3) Messengers.
- (4) First aid workers.
- (5) Hospital workers.
- (6) Fire watchers.
- (7) Amateur radio operators.

3. If an emergency occurs, able-bodied high school students, who have not previously volunteered for specific duties, should report as soon as possible after the ALL-CLEAR to the nearest warden's post or civil defense center for assignment to duty.

E. FIRST AID IN EMERGENCY SITUATIONS

1. Schools will assume unusual importance in the event of enemy attack. Under these conditions, when thousands of people may be injured or ill in a single school community, great reliance must be placed upon self-help within families, neighborhoods and communities.

2. First aid treatment required under war-time conditions is similar to that needed for everyday peacetime accidents. The difference is that large numbers of people will be in need of immediate attention and our regular medical

facilities will, in all probability, be insufficient to cope with the situation.

3. Medical supplies are apt to be inadequate and many improvisations may be necessary. Newspapers, old clothing and similar materials may be used in place of blankets as protection against moisture and cold. Undergarments and other clothing can be used as bandages, tourniquets, etc. Drinking cups may be made from paper.

a. *Injuries caused by force of an explosion:*

- (1) Traumatic:
 - (a) Open cuts and wounds.
 - (b) Fractures.
 - (c) Head injuries—brain concussion, etc.
 - (d) Hemorrhage—internal and external.
(See Chapters 4 and 7, A.R.C. First Aid Textbook)
- (2) Burns:
 - (a) Flash—caused by the bomb's heat flash.
 - (b) Flame—resulting from ordinary fires.
(See Chapter 8, A.R.C. First Aid Textbook)



(3) Radiation:

- (a) Only unshielded people less than 6,000 feet from the center of an atomic bomb explosion will be seriously exposed to radiation.
- (b) Within that area, people who have been in protected spots, such as in substantial buildings, behind thick walls, or behind a natural land barrier, are not likely to suffer radiation injuries.

b. Symptoms of major importance:

(1) It is necessary to recognize symptoms which are danger signals and see that they are called to the attention of a doctor or professional nurse immediately.

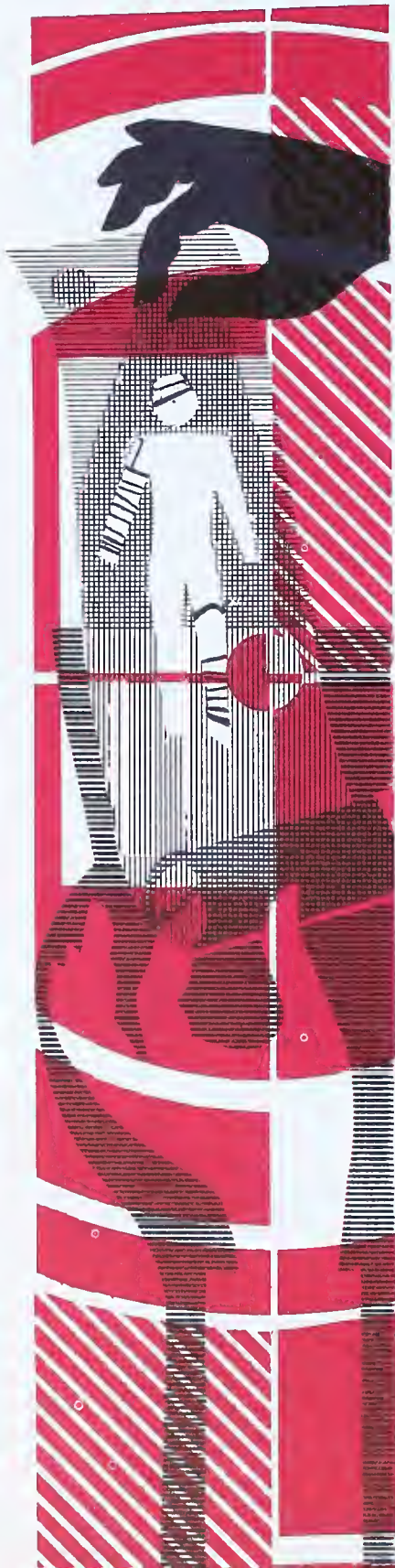
(2) Danger signals and symptoms which should be noted are:

- (a) Air hunger—sighing, gasping for breath.
- (b) Difficulty in breathing, marked change in breathing, irregularity, or choking.
- (c) Bleeding.
- (d) Excessive thirst.
- (e) Skin—pale, flushed, blue, cold, clammy, etc.
- (f) Sudden rise or drop in body temperature.
- (g) Marked changes in pulse rate.
- (h) Marked restlessness or sluggishness.
- (i) Speech difficulty—slow to answer or irrational.
- (j) Nausea and vomiting—especially repeated vomiting.
- (k) Pain.
- (l) Inability to move parts of body.

(3) First aiders continually should be on the lookout for marked changes in a patient's condition. Promptly call such changes to the attention of doctor or nurse, if available.

c. Specific types of injury:

- (1) Cuts and wounds.
- (2) Burns.
- (3) Fractures.
- (4) Hemorrhage.
- (5) Shock—accompanies all injuries in some degree, either immediate or delayed. (See Chapter 2, A.R.C. First Aid Textbook.) Shock indicates a failure of blood circulation. Every injured person is subject to shock and should be treated for shock. Shock varies in severity. In some cases it may hardly be noticed; in others, it may be so severe as to result in death. Signs of shock are:
 - (a) Weakness and faintness.
 - (b) Dizziness and nausea, sometimes vomiting.
 - (c) Skin ashen and moist, cold with perspiration.
 - (d) Eyes "vacant" and lack luster, with pupils wide and dilated.
 - (e) Weak, rapid pulse.
 - (f) Air hunger—breathing shallow and rapid, or sighing and gasping for breath.
 - (g) Excessive thirst.





d. *Treatment:*

(1) CUTS AND WOUNDS:

- (a) Keep clean and covered.
- (b) Watch dressings for bleeding. (Slight pressure will usually control bleeding.)
- (c) Watch for signs of shock.
- (d) Support injured part and keep blanket or similar coverings from pressing on it.

(2) BURNS:

- (a) Treat for shock, if signs and symptoms are noted.
- (b) Apply only dry, sterile dressings. (Bandage each toe or finger separately).
- (c) Encourage patient to drink water, milk, etc.
- (d) Notify doctor or nurse of all severe burns.

(3) FRACTURES:

- (a) Apply splints to broken bones, but do not attempt to set them.
- (b) Support splinted bones and do not move patient with severe fractures unless absolutely necessary.

(4) CONCUSSION AND OTHER HEAD INJURIES:

- (a) Keep patient lying down with head level.
- (b) Keep patient warm with adequate covering.
- (c) Do not give stimulants, such as coffee, etc.
- (d) Watch for bleeding, particularly from ears and nose.
- (e) Treat for shock.
- (f) Notify doctor or nurse.

(5) HEMORRHAGE:

- (a) External—visible bleeding from surface wound. Usually can be controlled by applying pressure. Apply tourniquet, if possible.
- (b) Internal—unseen bleeding marked by signs and symptoms of shock. Treat as for shock and notify doctor or nurse.

(6) SHOCK:

- (a) If hemorrhage exists, stop if possible.
- (b) Conserve body heat—apply covering, blanket, coat, newspaper, etc.
- (c) Keep patient quiet and do not move unless necessary.
- (d) Administer salt solution by mouth, if patient can accept it.
- (e) Notify doctor or nurse immediately.



F. PARTIAL LIST OF REFERENCES ON FIRST AID

1. Emergency Action To Save Lives, U. S. Government Printing Office, Washington 25, D. C., 32 pp. Individual copies, 5 cents. 25 per cent discount for orders in excess of 100. (This booklet describes emergency action in first aid only and does not propose to take the place of a complete course. Valuable, however, for general information in case of a disaster. Contains a list of emergency first aid items for a family of four persons or less.)
2. Civil Defense Household First Aid Kit, U. S. Government Printing Office, Washington 25, D. C., single sheet pamphlet. Price \$1.50 per 100 copies. (A list of emergency first aid items for a family of four persons or less. Useful for school study and home information.)
3. American Red Cross First Aid Textbook, The Blakiston Company, Philadelphia, Pa., 1945, Revised, 254 pp, 60 cents. (A textbook for use in teaching first aid to adults.)
4. American Red Cross First Aid Textbook For Juniors, The Blakiston Company, Philadelphia, Pa., 1949, 132 pp, \$1.00. (A textbook for use in teaching first aid in schools and other youth organizations and to students who are 12, 13 or 14 years old or who are in the seventh, eighth or ninth grade.)
5. Civil Defense Supplement To The American Red Cross First Aid Textbook, The Blakiston Company, Philadelphia, Pa., 1951, 47 pp, 10 cents.





G. FIRST AID INSTRUCTORS

1. Information received by the Department of Public Instruction indicates that almost all schools in the Commonwealth of Pennsylvania are now teaching first aid, or plan early introduction of the subject. In this connection, many school administrators have reported that one difficulty frequently encountered in providing first aid instruction is the lack of qualified instructors.

2. The American National Red Cross has always been most cooperative in providing first aid instructors whenever possible. School administrators may obtain information concerning the availability of instructors by making inquiry at their nearest Red Cross Chapter.

3. A complete list of Red Cross Chapters in Pennsylvania, as of this publication date, follows:

<i>Chapter</i>	<i>Headquarters</i>
Adams Co.	Gettysburg
Armstrong Co.	Kittanning
Beaver Co.	New Brighton
Bedford Co.	Bedford
Bellefonte	Bellefonte
Berks Co.	Reading
Bethlehem	Bethlehem
Blair Co.	Altoona
Bloomsburg	Bloomsburg
Bradford Co.	Towanda
Bradford-McKean Co.	Bradford
Brookville	Brookville
Butler Co.	Butler
Cambria Co.	Johnstown

<i>Chapter</i>	<i>Headquarters</i>
Cameron Co.	Emporium
Carbon Co.	Mauch Chunk
Carbondale	Carbondale
Carlisle	Carlisle
Charleroi	Charleroi
Chestnut Ridge	Latrobe
Clarion Co.	Clarion
Clearfield	Clearfield
Corry	Corry
Danville	Danville
Donora	Donora
DuBois	DuBois
Eastern Clinton Co.	Lock Haven
Easton	Easton

<i>Chapter</i>	<i>Headquarters</i>
Erie	Erie
Fayette Co.	Uniontown
Forest City-Vandling	Forest City
Forest Co.	Tionesta
Franklin Co.	Chambersburg
Franklin-Venango	Franklin
Fulton Co.	McConnellsburg
Galeton	Galeton
Girard	Girard
Greater Berwick	Berwick
Greene Co.	Waynesburg
Hanover	Hanover
Harrisburg	Harrisburg
Hazleton	Hazleton
Honeoye-Oswayo Valley	Shinglehouse
Huntingdon	Huntingdon
Indiana Co.	Indiana
Johnsonburg	Johnsonburg
Juniata Co.	Mifflintown
Kane	Kane
Lancaster	Lancaster
Lawrence Co.	New Castle
Lebanon Co.	Lebanon
Lehigh Co.	Allentown
Lycoming Co.	Williamsport
Mahanoy City	Mahanoy City
Meadville-W. Crawford Co.	Meadville
Mechanicsburg	Mechanicsburg
Mercer Co.	Sharon
Middletown	Middletown
Mifflin Co.	Lewistown
Milton	Milton
Monessen-Belle-Vernon	Monessen
Monroe Co.	Stroudsburg
Montrose	Montrose
Moshannon	Philipsburg
Mt. Carmel	Mt. Carmel
Mt. Pleasant	Mt. Pleasant
Mt. Union	Mt. Union
Nanticoke-Newport	Nanticoke

<i>Chapter</i>	<i>Headquarters</i>
New Kensington	New Kensington
Northumberland	Northumberland
Oil City	Oil City
Pike Co.	Milford
Pittsburgh	Pittsburgh
Pittston	Pittston
Port Allegany	Port Allegany
Potter Co.	Coudersport
Punxsutawney	Punxsutawney
Renovo	Renovo
Ridgway	Ridgway
St. Marys	St. Marys
Scranton	Scranton
Shamokin	Shamokin
Shenandoah	Shenandoah
Shippensburg	Shippensburg
Smethport	Smethport
Snyder Co.	Selinsgrove
Somerset Co.	Somerset
S. E. Penna.	Philadelphia
So. Schuylkill	Pottsville
State College	State College
Steelton	Steelton
Sullivan Co.	Dushore
Sunbury	Sunbury
Susquehanna Co.	Susquehanna
Tioga Co.	Wellsboro
Titusville	Titusville
Tyrone	Tyrone
Union Co.	Lewisburg
Vandergrift	Vandergrift
Wallingford	Wallingford
Warren Co.	Warren
Washington Co.	Washington
Wayne Co.	Honesdale
Waynesboro	Waynesboro
Westmoreland Co.	Greensburg
Windber	Windber
Wyoming Co.	Tunkhannock
Wyoming Valley	Wilkes-Barre
York Co.	York



H. A FAMILY FIRST AID KIT

1. The Federal Civil Defense Administration recommends a family First Aid Kit for every home in the United States.

2. In publicizing the matter of home medical supplies, stress should be made on the need in every family of at least ONE person properly trained in first aid. There will be no one else available to help at the time of an emergency and each household must be ready to take care of itself.

3. The average family will have a great part of the Kit (listed below) already on their shelves. It is suggested that each procure those items not now on hand. The supplies should always be kept in full quantity, ready for any emergency.

4. First aid items, amounts, etc., for the average family, should include the following:

ITEM	QUANTITY	USE
a. Antiseptic solution (Benzalkonium chloride solution. 1 to 1000 parts of water or usual organic mercurial compounds in water. Drug stores have them under several trade names.)	3 to 6 oz. bottle	For open wounds, scratches and cuts. (Not for burns.)
b. Aromatic spirits of ammonia.	1 to 2 oz. bottle	For faintness. Adult dose $\frac{1}{2}$ teaspoonful in cup of water. Children 5 to 10 drops in $\frac{1}{2}$ glass of water. As smelling salts, hold bottle under nose.
c. Table salt (Sodium chloride tablets, 10 grains)	1 box	For shock. Dissolve 1 teaspoonful and $\frac{1}{2}$ teaspoonful baking soda in 1 quart of water. Have patient drink as much as he will. Don't give to unconscious or semi-conscious person. If using substitutes, dissolve six 10-grain sodium chloride tablets and six 5-grain sodium bicarbonate (or sodium citrate) in water.
d. Baking soda (Sodium bicarbonate)	8 to 10 oz. box	For some slight protection against nerve gas. Dissolve 4 teaspoonfuls of baking soda in 1 quart of water. Wash parts of body exposed to nerve gas with it or saturate cloth and place over face as gas mask.
e. Triangular bandages, compressed, 37" x 37" x 52", fold, with 2 safety pins (Muslin or other strong material)	4	For a sling, covering, or dressing. Use as a part of tourniquet.

ITEM	QUANTITY	USE
f. Large bath towels	2	For bandages or dressings. Old, soft towels and sheets are best. Cut to sizes necessary to cover wounds. Towels are burn dressings. Place over burns and fasten with triangular bandage or strips of sheet. (Towels and sheets should be laundered, ironed and packaged in heavy paper. Relaunder every 3 months.)
g. Small bath towels	2	Same as f above.
h. Bed sheet	1	Same as f above.
i. Medium first aid dressings, 8" x 7½", folded, sterile with gauze enclosed cotton pads and gauze bandage (Must be purchased)	2	For open wounds or for dry dressings for burns. (These are packaged sterile. Don't try to make your own.)
j. Small first aid dressings, 4" x 7", folded, sterile with gauze enclosed cotton pads and gauze bandage (Must be purchased)	2	Same as i above...
k. Paper drinking cups, envelope or cardboard type	25 to 50	For administering stimulants and liquids.
l. Eye drops, castor oil or bland eye drops (Carried by druggists under various trade names)	½ to 1 oz. bottle with dropper	For eyes irritated by dust, smoke or fumes. Use 2 drops in each eye. Apply cold compresses every 20 minutes, if possible.
m. Flashlight	1	Electric lights may go out. Wrap batteries in moisture-proof covering. Don't keep them in flashlight.
n. Safety pins, 1½" long	15	For holding bandages in place.
o. Razor blades, single edge (Sharp knife or scissors)	3	For cutting bandages and dressings, or for removing clothing from injured part.
p. Toilet soap	1 bar	For cleaning skin.
q. Splints, plastic or wooden, ⅛" to ¼" thick, 3½" wide, by 12" to 15" long (Orange crate sidings or shingles cut to size)	12	For splinting broken arms or legs.
r. Tongue blades, wooden shingles, pieces of orange crate (or other light wood cut to approximately 1½" x 6")	12	For splinting broken fingers or other small bones and for stirring solutions.
s. Water purification tablets, iodine or chlorine (Chlorine capsules sold under various trade names)	Bottle of 100	For purifying water when it can't be boiled. (Tap water officially declared radioactive must not be used for any purpose.)
t. Measuring spoons, plastic or metal	1 set	For measuring or stirring solutions.



I. A SUGGESTED LIST OF SCHOOL FIRST AID SUPPLIES

1. To meet the threat of enemy attack, each school should keep on hand and have readily available at least a small supply of first aid materials.

2. A suggested list of first aid materials, suitable for a large school and sufficient to provide preliminary care for 25 to 50 people, follows:

	<i>Quantity</i>	<i>Item</i>
a.	5	Litters
b.	10	Blankets
c.	50	Triangular muslin bandages (37" x 37" x 52" with 2 safety pins)
d.	10	Large cellulose burn pads (22" x 36" with gauze strip and safety pins)
e.	10	Medium cellulose burn pads (22" x 18" with gauze strip and safety pins)
f.	25	Large sterile dressings (11¾" square)
g.	100	Small sterile dressings (4" square)
h.	10	Packages gauze roller bandage (3" x 10 yds.)
i.	10	Packages gauze roller bandage (2" x 6 yds.)
j.	12	Spools adhesive plaster (3" x 5 yds.)
k.	5	Pounds sterile absorbent cotton
l.	1	Box cotton swabs on applicators
m.	1	Box wooden tongue depressors
n.	6	Angular bandage scissors
o.	1	Package paper cups (8 oz. nesting)
p.	12	Cards large safety pins
q.	1	Pint tincture merthiolate
r.	3	Large bars toilet soap
s.	2	Surgical hand brushes
t.	6	Basswood splints (4" x 18")
u.	2	Web tourniquets with buckle

J. SCHOOL DISPLAY IDEAS

1. *Your County (or City) Prepares to Protect Its People*

Use a large scale map of your locality. Show emergency hospitals, mass care centers, emergency routes, etc. Mark them with symbols, acetate overlays, or paint. This will:

- (a) *Show the people that your CD planning is advancing.*
- (b) *Help to educate them as to locations they should know.*

2. *Make Up Sample Kits of Home Medical Supplies; Home Shelter Needs; Home Fire Equipment; Emergency Food Shelves*

(See section L—"Partial Bibliography For Teachers and Students", particularly references 1, 9, 7 and 5, respectively.)

3. *A Mock-Up Showing the Concentric Circles for First Aid Stations*

Those needed round each bomb burst—96 stations per bomb, as indicated on page 53 of "Health Services and Special Weapons Defense," listed in Section L—"Partial Bibliography For Teachers and Students." Good window to tie-in with local Red Cross promotion, and with recruitment.

4. *Me, My Family, My Community, My County, My Area, My State, My Country*

The "pebble in the pool" motif.

5. *Your Fire May be One of Thousands. Learn to Put it Out*

Show home fire fighting equipment; mannequin working with stirrup pump, etc. Get cooperation of local Fire Company which will give additional ideas.

6. *The Family Becomes a Team Again*

Double display. One side of display portrays father aiming musket, child holding bullets, wife loading a spare gun, or similar scene to indicate a family banded together to ward off danger. Other side of display shows a family preparing for A-Bomb—drawing window blinds, preparing shelter area, etc. Same thought can furnish basis for dramatic skit for schools, clubs or organizations.

7. *It's Not Our Scenery They'll Want*

Show production, assembly lines and the like,

that must keep going. Local industries can perhaps provide photographic blow-ups.

8. *Every Area Will Have a Part to Play*

Use a relief model of the State. Use toy figures from the five and ten cent store to show teams of firemen, nurses, steam shovel, and the like, coming from outlying sections to help the stricken area; cars, ambulances, etc., streaming from target section into outlying parts.

9. *There is Now a Fourth Arm to National Service, Army, Navy, Air—Civil*

Use mannequins, dressed in military uniform, greeting a housewife in an apron, with a CD armband on her arm.

10. *No City Will be Wiped Out. Know the Job You Must Do After Attack if it Comes*

Use a large map as a background, with a



STANDARD SIGNS FOR CIVIL DEFENSE USE



SIGN No.1
17" x 12"



SIGN No.9
12" x 20"



SIGN No.2
17" x 12"



SIGN No.3
17" x 12"



SIGN No.4
17" x 12"



SIGN No.5
17" x 12"



SIGN No.10
12" x 20"



SIGN No.6
17" x 12"



SIGN No.7
17" x 12"



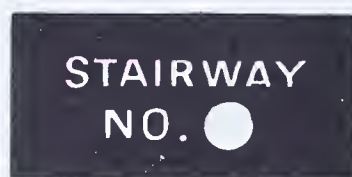
SIGN No.11
12" x 20"



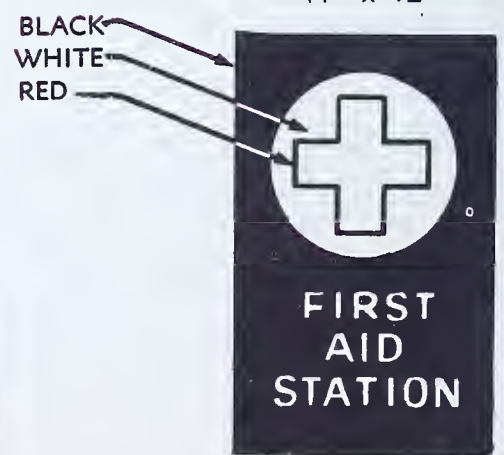
SIGN No.8
17" x 12"



SIGN No.12
12" x 20"



SIGN No.13
7 1/4" x 15 3/4"



SIGN No.14
12" x 20"

bomb burst marked on it showing how relatively small a part of the locality will be directly under the bomb.

Have a mannequin seated in a comfortable chair, bridge lamp behind his chair, etc. He is reading "How to Survive an Atomic Bomb." On the floor, or the table beside him, is the Red Cross First Aid Booklet, CD supplement. Volunteer blanks used by your local Recruiting Division should be plainly visible.

11. *Will it be This:*

Everyone running wildly, not knowing what to do or where to go.

Or This:

Everyone with a job to do and busily doing it; teams forming, etc.

(NOTE: This makes a good poster subject for school art classes, high school poster contests, etc.)

12. *Home Industry is the Mainstay of the Fighting Services. Civil Defense Must Keep it Going*

Toy trains (from local toy store) filled with materials running to docks, air fields, army camps. Use toy cranes, etc., to give height. Superimpose the whole on a map or drawing of Pennsylvania.

13. *We Know the Bomb Can Do Its Job. Will You Do Yours?*

An easy display to produce. A figure stands with his back to the audience looking at a huge chart on which are listed all the jobs for which volunteers are needed . . . Police reserves, wardens, ground observers, firefighters, canteen workers, nurses' aids, litter bearers, rescue

workers, and the like. It is far more effective if it is possible to have photographs or drawings showing people engaged in each activity by each listing.

14. *Specific Windows on Needed Services, Such as Police, Fire Auxiliaries, Etc.*

Mannequin dressed as a policeman with his hand out in welcome to a man and woman. "We need your help; will you join our Reserves?"

15. *After a Bomb, There Will Be Two Kinds of People; Those WHO CAN Help; Those WHO NEED Help*

Except under a direct hit, the choice is largely yours—but you must make it now, while there is time to protect yourself and your family.

16. *For First Aid Training and Recruiting*

Show classroom, filled with classroom chairs; blackboard across the back of the window.

One of two mannequins seated; the rest of the chairs empty. Instructor, dressed as a Red Cross worker, peering out of the display, "Where's the rest of my class?"

Facts about the need for one First Aider in each family; number of volunteers needed for ambulance service in your locality, etc., should be clearly written on the blackboard.

17. *Additional Suggestions*

A host of other ideas for plays, poster contests, window displays and similar exhibits for use by school children, teachers and parent-teacher groups are to be found in "Pennsylvania Week." (See Section L—"Partial Bibliography For Teachers and Students.")

K. MAGAZINE ARTICLES OF SPECIAL INTEREST TO TEACHERS

1. *American School Board Journal*
May, 1951, p. 19-21
"Is Your School Ready for the A-Bomb?"
by Robert Wilson.
Chicago. Discusses the responsibilities that must be assumed by schools in the civil defense effort.
2. *New York State Education*
April, 1951, p. 500-02
"Sharing Responsibility for Civil Defense."
by G. A. Carbaugh. (Tells of a joint training program of schools, parents, and townspeople.)
3. *The Nation's Schools*
April, 1951, p. 34-7
"Disaster from the Air."
by John W. Pritchard. Discusses protection program, drills, etc.
4. *The Instructor*
April, 1951, p. 24, 82
"What Can We Do About School Defense?"
Contribution of teachers discussed; list of "Helpful Materials" is included in the article.
5. *National Elementary Principal*
June, 1951, p. 3-48
"Children and the Present Emergency."
The whole issue of this magazine is devoted to the present emergency, its effect on children, and the role of the school in civil defense.
6. *National Parent-Teacher*
June, 1951, p. 32-5
"A Civil Defense Program for Parent-Teacher Associations."
7. *The School Executive*
June, 1951, p. 62-3
"Chicago's Blueprint for Civil Defense."
by Herold C. Hunt, Superintendent of Schools,
8. *Colliers*
October 27, 1951
"Preview of the War We Do Not Want."
Entire issue directly related to civil defense.
9. *American City*
March, 1952, p. 179
"Civil Defense Workers Will Have To Be Fed, Too."
10. *U. S. News*
July 4, 1952, p. 26-7
"If an Atom Bomb Hits, What Happens to a U. S. City?; Test Town Built and Wrecked."
11. *School and Society*
August 9, 1952, p. 87-90
"Place of Civil Defense in Education."
by E. K. Peckham. Discusses the importance of the school system in training civil defense personnel.
12. *National Education Association*
September, 1952, p. 364
"What are You doing about Civil Defense?"
13. *Journal of Home Economics*
October, 1952, p. 642-4
"Maine Practices Emergency Feeding."
14. *American City*
November, 1952, p. 119
"Voice Amplification for Air Attack Warning and Disaster Instructions."
Discusses the methods of giving verbal instructions to civilians at the time of attack.



L. PARTIAL BIBLIOGRAPHY FOR TEACHERS AND STUDENTS

1. *A Food Plan for Home Defense.*
State Council of Civil Defense, Harrisburg, Pennsylvania, 1952, Free.
2. *Annotated Civil Defense Bibliography for Teachers.*
U. S. Government Printing Office, Washington 25, D. C., December, 1951, 20 cents.
3. *Duck and Cover.*
U. S. Government Printing Office, Washington 25, D. C., 1951. (\$2.00 per 100 copies. Single copies, 5 cents.)
4. *Emergency Action to Save Lives.*
U. S. Government Printing Office, Washington 25, D. C., 1951, 5 cents.
5. *Emergency Welfare Services Training Course.*
State Council of Civil Defense, Harrisburg, Pennsylvania, 1952, Free.
6. *Feeding Manual.*
State Council of Civil Defense, Harrisburg, Pennsylvania, 1951, Free.
7. *Firefighting for Householders.*
U. S. Government Printing Office, Washington 25, D. C., 1951, 5 cents.
8. *Health Services and Special Weapons Defense.*
U. S. Government Printing Office, Washington 25, D. C., December, 1950, 60 cents.
9. *How To Survive An Atomic Bomb.*
Combat Forces Press, Washington 6, D. C., 1950. \$1.95 (Cloth). Bantam Books, Inc., New York, 1950, 25 cents (Paper).
10. *Interim Civil Defense Instructions for Schools and Colleges.*
U. S. Government Printing Office, Washington 25, D. C., August, 1951, 30 cents.
11. *Manual of Basic Training Auxiliary Police.*
State Council of Civil Defense, Harrisburg, Pennsylvania, 1951, Free.
12. *Medical Aspects of Atomic Weapons.*
Revised August 15, 1950, U. S. Government Printing Office, Washington 25, D. C., 10 cents.
13. *Pennsylvania Week.*
Pamphlet of Suggestions for Schools in the Celebration of Pennsylvania Week, State Council of Civil Defense, Harrisburg, Pennsylvania, October, 1952, Free.
14. *Police Services.*
U. S. Government Printing Office, Washington 25, D. C., May, 1951, 20 cents.
15. *Principles of Civil Defense Operations.*
U. S. Government Printing Office, Washington 25, D. C., July, 1951, 20 cents.
16. *The Rescue Service.*
U. S. Government Printing Office, Washington 25, D. C., May, 1951, 15 cents.
17. *The Warden Service.*
U. S. Government Printing Office, Washington 25, D. C., August, 1951, 20 cents.
18. *This Is Civil Defense.*
U. S. Government Printing Office, Washington 25, D. C., May, 1951, 10 cents.
19. *Survival Under Atomic Attack.*
U. S. Government Printing Office, Washington 25, D. C., 1950, 10 cents.
20. *United States Civil Defense.*
U. S. Government Printing Office, Washington 25, D. C., 1950, 25 cents.
21. *What You Should Know About Biological Warfare.*
U. S. Government Printing Office, Washington 25, D. C., February, 1951, 10 cents.



M. GENERAL CIVIL DEFENSE FILM LIST

1. The following films (16 mm. sound) are available on free loan to schools and other organizations interested in civil defense activities.

2. Requests for films should be addressed to: State Council of Civil Defense, Main Capitol Building, Harrisburg, Pennsylvania.

a. *An Introduction to Radiation Detection Instruments*—20 min.

Made for Armed Forces Special Weapons Project, shows radiation detection instruments available late in 1950, how monitoring is done in the field, the process of decontamination, and use of protective clothing. (Senior high, college and adult)

b. *Atomic Power*—19 min.

Shows development of atomic power from 1905 to 1945. Climax in the New Mexico experiment. (College and adult)

c. *Biological Warfare Defense for Farmers and Stockmen*—9 min.

The State Council of Civil Defense had this film made especially for the farmers and stockmen of Pennsylvania to point out the dangers of biological warfare. (Senior high, college and adult)

d. *Communications for Civil Defense*—32 min.

Shows communications in civil defense operations and reveals the part played by the rescue workers, welfare groups, auxiliary police, etc. (Adult groups)

e. *Decontamination of Streets*—17 min.

Detailed instructions to decontamination squads on clearing blister gas from streets. Shows co-

ordination between wardens and workers in specialized services following a disaster. (Adult groups)

f. *Duck and Cover*—10 min.

Should be shown to school children between the ages of 6 and 10 years. A cartoon character, "Bert the Turtle," urges youngsters to follow his example and "duck and cover" when danger strikes. Stresses safety directions and rules to follow at school and when children are away from adult supervision. (Elementary and junior high)

g. *Fire Fighting for Household*ers—10 min.

Since fire is the greatest destroyer and killer following any form of air attack, this film describes ways and means of preventing fires in homes and fighting home fires once they have started. (Junior high, senior high, college and adult)

h. *Fire Guard Plan*—25 min.

Three reels. Reel #1 shows a demonstration in which a fire bomb falls into a living room and sets it ablaze, and the warden's technique for putting it out. Reel #2 shows an actual air raid and illustrates special tasks arising from it. Reel #3 emphasizes the need for care of equipment and demonstrates the technique of working in smoke-filled rooms. (Adult groups)

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- i. *Fire's the Enemy*—11 min.
A British film directed at prospective recruits for the civil defense auxiliary fire services. Shows new developments in fire engines, fire launches, special hose-laying trucks, power extension ladder truck, etc. Rescue exercises on a fire-school tower are augmented by scenes at a real fire in which the auxiliary fighters play their part. (Adult groups)
- j. *If It Happened Here*—40 min.
A plant protection film developed by the Bethlehem Steel Company. (Adult groups)
- k. *Medical Services In Atomic Disaster PMF 5149, Part III*—28 min.
Shows the duties and responsibilities of medical personnel in alleviating the problems wrought by atomic bombing. (Adult groups, especially those interested in first aid, etc.)
- l. *Our Cities Must Fight*—10 min.
Reveals that much of America's strength is in her cities. Graphically explains why mass exodus from large cities should never happen. (Senior high, college and adult)
- m. *Pattern for Survival*—20 min.
Similar to "You Can Beat The A-Bomb." Stresses measures to follow for personal survival. (Adult groups)
- n. *School for Survival*—20 min.
Shows rescue services in operation following a disaster. An excellent film to stimulate interest in organizing rescue training groups. (Adult groups)
- o. *Self-Preservation In an Atomic Attack*—18 min.
Three servicemen demonstrate what individuals should do to protect themselves against an air or under-water explosion. The relative effects of blast, heat and radiation are also shown. (Junior high, senior high, college and adult)
- p. *Survival Under Atomic Attack*—10 min.
Scenes of devastated Hiroshima illustrate blast, heat, and radiation effects of atomic bombing. The citizen is instructed in ways to act at home, at work, or outdoors, with or without advance warning of an atomic attack. (Junior high, senior high, college and adult)
- q. *Tale of Two Cities*—17 min.
Film depicts the destruction of Nagasaki and Hiroshima. Should always be shown in conjunction with one of the survival films. (Adult groups)
- r. *The Waking Point*—20 min.
Produced for civil defense recruitment in Britain. By means of a dramatized story, the need for recruits and facilities available for training them, are skillfully and professionally depicted. (Adult groups)
- s. *What You Should Know About Biological Warfare*—10 min.
Points out defense measures to be taken against possible enemy attack with germs or other biological weapons. Recognizes that both rural and urban areas are vulnerable to this type of attack. (Senior high, college and adult)
- t. *You Can Beat the A-Bomb*—20 min.
Film shows how to select and equip a shelter area in the home. Presents many informative facts about the A-bomb. (Adult groups)
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TEACHERS' AND STUDENTS' NOTES:

